

## WHAT IS CLAIMED IS:

1. A computer system including a first computer node and a second computer node connected to said first computer node, comprising:

5           first storage area for storing data records;  
          first processor for storing data record to said first storage area asynchronously with said second computer node with the free time interval;

          second storage area for storing the data records copied from said first storage area; and

10           second processor for designating the record group to be read from said first storage area with the free time interval asynchronously with said first processor and then reading said record group to said second storage area for the purpose of input.

15           2. A computer system as claimed in claim 1, wherein said first storage area is allocated within said first computer node.

20           3. A computer system as claimed in claim 1, wherein said second storage area is allocated within said second computer node.

25           4. A computer system as claimed in claim 1, wherein said first storage area is allocated within an external storage device connecting with each other said first computer node and said second computer node.

5. A computer system as claimed in claim 1, wherein said second computer node is provided with a timer for starting said second processor with a constant time interval to read the data to said second storage area from said first storage area.

5 6. A computer system as claimed in claim 1, wherein said first processor stores said data record to said first storage area by giving an identifier number indicating the sequence of storing of said data record, said first storage area includes a plurality of entries to store the set of said identifier number and data record to read the data from said entry in the inverse direction to the direction to write the data to said entry with said first processor, and said second processor refers to the data in said first storage area copied to said second storage area in order to determine whether the relevant data record is correct or not depending on said identifier number.

10 7. A computer system as claimed in claim 6, wherein said first processor writes the identifier number of the relevant data record after having written said data record and said second processor determines that the relevant data record is correct  
15 20 when said identifier number of the data read to said second storage area has continuity but the relevant data record is incorrect when said identifier number does not have continuity.

25 8. A computer system as claimed in claim 1, wherein said first processor further includes an error checking code generator for generating an error checking code for said data

record to write said data record and said error checking code to said first storage area and said second processor checks an error, with said error checking code, of the data read to said second storage area and determines that the relevant data record is correct when no error is checked or incorrect when an error is checked.

9. A computer system as claimed in claim 8, wherein said first storage area includes a plurality of entries for storing a set of said error checking code and data record to read the data in the inverse direction to the direction to write the data to said entry with said first processor.

10. A computer system connecting a first computer node and a second computer node, wherein said first computer node comprising a first storage area to store the data record, a first processor to store said data record to said first storage area asynchronously with said second computer node in the desired time interval and a data transmit request generator to generate a data transmit request for transmitting said data record of said first storage area to said second computer node in the desired time interval, and said second computer node comprising a second storage area to store the data record of said copied storage area and a second processor to refer to the data record of said second storage area asynchronously with said first computer node in the desired time interval.

11. A data transfer method of computer system including

a communication means in which a program operating on the second computer node can refer to the data formed of one or more records stored in the first storage area on the first computer node through the copying in the second storage area on said second computer node by designating said storage area, comprising the steps of:

storing the data formed of one or more records to said first storage area in the desired time interval during operation on said first computer node; and

referring to the designated data, through the copying in said second storage area, of said first storage area using said communication means in the desired time interval during operation on said second computer node.

12. A data transfer method of computer system including a communication means in which a program operating on the first computer node having a first storage area can store in direct the data formed of one or more records of said first storage area to the second storage area within the main storage of the second computer node, comprising the steps of:

storing the data formed of one or more records in said second storage area using said communication means in the desired time interval during operation on said first computer node; and

referring to said data in the second area in the desired time interval during operation on said second computer node.

13. A data transfer method of computer system including a first communication means in which a program operating on the first computer node can store in direct the data to the first storage area in an external storage device and a second communication means in which a program operating on the second computer node can refer to the data by copying such data to the second storage area on said second computer node by designating said first storage area; comprising:

first step for storing data formed of one or more records to said first storage area in the desired time interval using said first communication means during operation on said first computer node; and

second step for referring to the designated data in said first storage area by copying such data to said second storage area using said second communication means in the desired time interval asynchronously with said first step during operation on said second computer node.

14. A data transfer method as claimed in claim 11, further comprising:

step in which said first storage area includes a plurality of entries wherein a set of identifier number and data record is stored, operates on said first computer node, writes said identifier number of the relevant data record after writing said data record and then reads said data record from said entry in the inverse direction to the direction to write data record

to said entry; and

step for referring to the data in said first storage area copied to said second storage area and determining that relevant data record is correct when said identifier number of the data read to said second storage area has continuity or incorrect when said identifier number does not have continuity during operation on said second computer node.

15. A data transfer method as claimed in claim 11, comprising:

step in which said first storage area includes a plurality of entries to which a set of the error checking code and data record is stored, operates on said first computer node, writes said data record and its error checking code to said first storage area and reads the data record from said entry in the direction identical to the direction to write data record to said entry; and

step for checking an error with said error checking code for the data read to said second storage area and determines that relevant data record is correct when no error is detected or is incorrect when an error is checked during operation on said second computer node.